

# Why Reduce Air Pollution from Transportation Sources?

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- Air pollution poses a public health risk for all, especially ...
- Massachusetts does not meet EPA's health based air quality standard for ozone
  - Transportation and construction sources contribute more than half of New England's nitrogen oxide emissions, a key ingredient in the formation of ozone smog
  - Diesel engines are significant contributors to air pollution, especially in urban areas -- account more than  $\frac{3}{4}$  of all diesel particulate matter emissions in Suffolk County
- New England has some of the highest asthma rates in the country – all six New England states have childhood asthma rates above 10 percent
- There are cost-effective ways to reduce pollution from the transportation sector

# EPA's Voluntary Transportation Programs

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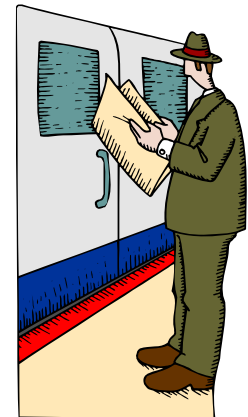
- Best Workplaces for Commuters
- Voluntary Diesel Retrofit Program:
  - Construction Retrofits
- Smartway Transport Partnership
  - Anti-idling outreach
- Clean School Bus USA



# Best Workplaces for Commuters – New England



- EPA partnership with US DOT to recognize employers offering innovative commuter benefits that address the twin problems of air pollution and traffic congestion
- As of July 2006, 144 employers, and more than 180,000 employees are on the list of New England's Best Workplaces for Commuters
- New England Hospitals include
  - Beth Israel Deaconess Medical Center
  - Brigham and Women's Hospital
  - Dana-Farber Cancer Institute
  - MGH
  - Hospital of Saint Raphael
  - Dartmouth-Hitchcock Medical Center
  - Kent Hospital
  - Norwalk Hospital
  - Shriners Burn Hospital
  - Logan Health Center
  - Fletcher Allen Health Care



# Get on the List!

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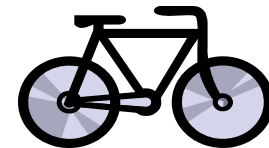
- Offer an outstanding commuter benefits package
- Provide **one** of the following:
  - Transit subsidy, vouchers, or passes (\$30/month min)
  - Parking / cash out (\$30/month min)
  - Telecommuting (6% of trips reduced min)
  - Something else (must be approved by federal team)
- Provide a guaranteed ride home program
- Centralize commuter benefit information

# Supporting Benefits

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- Employers must also provide at least three supporting benefits, such as:
  - Bike parking, showers, lockers
  - Commuting awards program
  - Compressed work schedules
  - Telecommuting
  - On-site amenities



# EPA's Clean Diesel Campaign - Regulations for New Engines

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- Nationally, EPA has set standards for **new diesel engines and diesel fuel** that will result in the use of advanced pollution control technology
  - In Dec. 2000, EPA set very stringent standards for new heavy-duty trucks and buses that take full effect beginning in 2007
  - In May 2004, EPA set very stringent standards for new nonroad diesel engines which will take effect beginning in 2008
  - The new standards will cut PM and NOx emissions from new diesel engines by over 90 percent

# EPA's Clean Diesel Campaign: Reducing Emissions from Existing Engines

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- National Voluntary Diesel Retrofit Program reduces pollution from **existing diesel engines** through
  - Advanced pollution controls
    - Diesel Oxidation Catalyst reduces PM emissions 20 – 40%
    - Diesel Particulate Matter Filter used in combination with ULSD reduces PM emissions 90 percent
  - Cleaner diesel fuel
    - Low sulfur diesel fuel (300 ppm) reduces PM emissions 10-15 percent compared to non-road diesel fuel
    - Ultra low sulfur diesel fuel (15 ppm) reduces PM emissions an additional 5-10 percent
    - Biodiesel (B20 blend) reduces PM emissions 10 percent
- Boston Area projects include
  - MASCO Shuttle Buses
  - City of Cambridge/MIT vehicles
  - Harvard University
  - Boston Tourist Trolleys

# Construction Retrofits

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- Reduces pollution from equipment and improves air quality
  - Reduces worker exposure
  - Addresses neighborhood concerns
- Contract requirements
  - Include request for equipment with advanced pollution controls and or cleaner fuel in Bid Spec
  - Ensures emissions reductions without sacrificing the benefits of a competitive bidding process.
  - Both public and private organizations in New England have initiated construction retrofit programs using contract language
    - Connecticut Dept. of Transportation
    - Massachusetts Highway Department
    - MASSPORT
    - Massachusetts Division of Capital Asset Management
    - Massachusetts Bay Transportation Authority
    - Dana Farber Cancer Institute
    - Town of Natick
- GB3 provides technical assistance
  - Model bid-specs
  - Guidance in tailoring model language to specific needs of Boston area institutions
    - MA Department of Conservation and Recreation
    - Harvard University



# Voluntary Diesel Retrofit Program

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- SmartWay Transport
  - Voluntary partnership between EPA and the freight industry to increase energy efficiency and energy security; reduce air pollution and greenhouse gases
  - Promotes idle reduction and other measures to reduce diesel from trucks
- GB3 Idle Reduction Activity
  - Massachusetts law limits unnecessary idling to five minutes
  - EPA has developed educational materials to discourage idling
  - Simple measures can improve compliance
    - Post no-idling signs
    - Remind companies that are delivering to your hospital

# For More Information

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